

COMPUTERS & EDUCATION

An International Journal

Editors:

Rachelle S. Heller The George Washington University

Jean D.M. Underwood The Nottingham Trent University

Volume Contents and Author Index

**VOLUME 43
2004**



CONTENTS

Numbers 1-2

J.D.M. Underwood and J. Gardner	1	CAL'03 Preface
R. Sutherland, with the InterActive Project Team	5	Designs for learning: ICT and knowledge in the class-room
G. Conole, M. Dyke, M. Oliver and J. Seale	17	Mapping pedagogy and tools for effective learning design
J. Cook and M. Smith	35	Beyond formal learning: Informal community eLearning
C. Evans, N.J. Gibbons, K. Shah and D.K. Griffin	49	Virtual learning in the biological sciences: pitfalls of simply "putting notes on the web"
D. Galanouli, C. Murphy and J. Gardner	63	Teachers' perceptions of the effectiveness of ICT-competence training
E. García-Luque, T. Ortega, J.M. Forja and A. Gómez-Parra	81	Using a laboratory simulator in the teaching and study of chemical processes in estuarine systems
A. Jones, C. Blake, C. Davies and E. Scanlon	91	Digital maps for learning: A review and prospects
M. Lilley, T. Barker and C. Britton	109	The development and evaluation of a software prototype for computer-adaptive testing
S. Matthewman and P. Triggs	125	'Obsessive compulsive font disorder': the challenge of supporting pupils writing with the computer
S. Price and Y. Rogers	137	Let's get physical: The learning benefits of interacting in digitally augmented physical spaces
E. Scanlon, C. Colwell, M. Cooper and T. Di Paolo	153	Remote experiments, re-versioning and re-thinking science learning
A. Thurston	165	Promoting multicultural education in the primary classroom: Broadband videoconferencing facilities and digital video
R. Wegerif	179	The role of educational software as a support for teaching and learning conversations
J. Wishart	193	Internet safety in emerging educational contexts
M. Zenios, P. Goodyear and C. Jones	205	Researching the impact of the networked information environment on learning and teaching

Number 3

- | | | |
|---|-----|---|
| C.P. Lim and C.S. Chai | 215 | An activity-theoretical approach to research of ICT integration in Singapore schools: Orienting activities and learner autonomy |
| M.L. Wen, C.-C. Tsai,
H.-M. Lin and S.-C. Chuang | 237 | Cognitive-metacognitive and content-technical aspects of constructivist Internet-based learning environments: a LISREL analysis |
| W.L. Turner and A.C. Stylianou | 249 | The IT advantage assessment model: Applying an expanded value chain model to academia |
| S. Rafaeli, M. Barak,
Y. Dan-Gur and E. Toch | 273 | QSIA – a Web-based environment for learning, assessing and knowledge sharing in communities |
| C. Depradine and G. Gay | 291 | Active participation of integrated development environments in the teaching of object-oriented programming |
| J.P. van Braak | 299 | Domains and determinants of university students' self-perceived computer competence |
| J.B. Pena-Shaff and C. Nicholls | 313 | Erratum to: Analyzing student interactions and meaning construction in computer bulletin board discussions [Comput. Educ. 42 (3) 243-265] |

Number 4

- | | | |
|--|-----|--|
| G. Stefansson | 315 | The tutor-web: An educational system for classroom presentation, evaluation and self-study |
| M. Xenos | 345 | Prediction and assessment of student behaviour in open and distance education in computers using Bayesian networks |
| S.K. Ong and M.A. Mannan | 361 | Virtual reality simulations and animations in a web-based interactive manufacturing engineering module |
| A. Demb, D. Erickson
and S. Hawkins-Wilding | 383 | The laptop alternative: Student reactions and strategic implications |
| T. Downes | 403 | Book review |
| J. Parkinson | 407 | Book review |